(October 4, 2000)

Children & Youth Performance Outcomes
Pilot Study Protocol and Methodology Summary

Introduction

As a part of the commitment that was originally made by DMH, the California Mental Health Directors Association (CMHDA) and the California Mental Health Planning Council (CMHPC) to re-evaluate and, if possible, improve the Children's Performance Outcome System that was implemented in April 1998, a pilot project is to be conducted to test alternative measures for use in the Children's Performance Outcome System and will involve the participation of volunteer county mental health programs. This document specifies the protocols and methodologies to be used by these counties in conducting the pilot test of alternative measures in order to ensure a comprehensive comparative analysis between the existing system and any alternative measures.

Pilot Instruments

The alternative instruments to be piloted for evaluation are the Ohio Scales, which provide multi-axial forms that ask the same questions of the clinician, parent/caregiver, and youth. These measurement tools were selected based on a comprehensive evaluation of available assessment tools and with the input of representatives of county clinical staff, quality management staff, evaluation staff, the CMHPC, academic staff from both UC San Francisco and UC Davis, DMH staff, and nationally recognized experts. The Ohio Scales provide potential alternative measures to the Child and Adolescent Functional Assessment Scale (CAFAS), the Child Behavior Checklist (CBCL) and the Youth Self-Report (YSR). In addition to these functional scales, the pilot will include a face sheet with general descriptive information and risk factors to test potential predictive risk factor variables.

Methodology

Volunteer Counties will administer the Ohio Scales, the CLESP and a face sheet to a sample of target population clients over a staggered six-month time period *[Estimated Time 1 = March-May 2001 and Estimated Time 2 = September-November 2001]*. If available, the Youth Services Survey for Families (YSS-F) would be completed at Time 2 or at discharge. For the purpose of gathering comparative data, the CAFAS will remain a requirement; however, the CBCL, YSR and CLEP will not be required to be administered for the pilot sample. Representatives from each county participating in the study will assist in the evaluation of instruments to be tested during the pilot. At the conclusion of the pilot, each county will provide a written summary that includes clinician, client and evaluator perspectives regarding the administered instruments that addresses the evaluation issues (as listed in the analysis and evaluation section of this document).

Sample Selection and Target Population

Each volunteer county will be responsible for providing data on a sample of target population clients. As this is only a pilot, and many counties have expressed an interest in participating, counties should only administer the pilot instruments to a sample of target clients and not to the countywide target population. The target population for this pilot project includes only those county mental health clients who are under 18 years of age who receive services for 60 days or longer. Clients in crisis who do not have a serious and persistent emotional disorder and will not receive treatment for at least 60 days are not considered part of our target population. Clients only receiving medication services are also not considered part of our target population.

Counties should do their best to ensure these data are as representative as possible of the client population seen by county mental health programs. Therefore, to increase the likelihood that results of the study have statewide application, it is desired that the statewide sample provide adequate coverage by:

- Age,
- Gender,
- Levels of care
  (residential care, day treatment, outpatient, case management, etc.),
- Geographical region, and
- Other county characteristics the task force deems applicable

Thus, when applying to be a pilot county, counties will be asked to provide information that will allow DMH to assess the statewide coverage for these domains: demographic groupings, county characteristics, and service characteristics.

Note: Since only English and Spanish translations will be made available during the pilot, perceptions regarding cultural sensitivity will be solicited separately via focus groups.

Training

Prior to beginning instrument administration, each participating county will implement a training program for program managers who will oversee the project, clinicians who will administer the instruments and interpret the results, and any other staff involved.

While each county may design its own unique training process, each training program must include the following:

- All county staff who are involved in the pilot study will receive, read and understand the Pilot Study Protocol and Methodology Summary.
- A presentation of the fact that Realignment legislation requires counties to report outcome data to the State in exchange for mental health funding and greater flexibility in program development
- Goals of the pilot project
- Standardized administration of instruments for consistency across raters and participants
- How the data from such a system could be used to enhance quality and effectiveness of services
- Interpretation of scores generated from instruments (as applicable) and how they can be useful in treatment planning and evaluation

Additionally, it is recommended that each county invite their mental health director and/or other high level staff to come and introduce the training and communicate their commitment to the process of identifying cost effective and informative tools for use in assessing outcomes. It is further recommended that each county institute a process whereby:

- Mentors facilitate training and continuing education on specific instruments
- Issues relating to administration of the instruments and interpretation of scores are discussed and documented in regular staff meetings or intermittent focus groups
- Follow-up training is provided after clinicians start to administer the instruments

NOTE: DMH Staff will be available to participate/provide training at the request of each county.

At the conclusion of the study, each pilot county will provide DMH with a narrative overview of their training program, including what worked well and what was less effective. Additionally, the training program description should include an estimate of staff resources required as well as other costs associated with training. DMH staff will provide this information to all counties as they plan for statewide implementation.

Instrument Administration

The administration schedule is designed to provide information that will allow for the analysis of time 1 and time 2 (longitudinal) data. In order to accomplish this, effort must be dedicated to trying to make sure that each client who completed an instrument at time 1 also complete a time 2 instrument.

As appropriate, specific instruments may be administered by different staff or team members, including a nurse, case manager, psychiatrist, other staff, or a peer counselor. For instruments designed to be a self-report, counties need to track whether or not the instruments were actually self-administered or required the assistance of a clinician or other staff.

The instruments will be administered according to the following process:

TABLE 1 – Schedule of Instrument Administration

Time 1 Administration			**Intervening Time**	**Time 2 Administration**		
Month 1	Month 2	Month 3	Six Month Window	6 Months from Month 1	6 Months from Month 2	6 Months from Month 3
• New Intakes • Ongoing Clients	• New Intakes • Ongoing Clients	• New Intakes • Ongoing Clients	Ongoing treatment Interventions	• Time 1 clients	• Time 1 clients	• Time 1 clients

Data Reporting

For the purpose of the pilot project, counties will fax in completed forms to the DMH *TELE*form system for automated entry and management of the data. If possible, DMH would like to receive a data extract that provides units of service by mode of service for the sample population at the end of the pilot. DMH will maintain a database of the pilot scores and provide regular data reports at Task Force meetings during the course of the pilot.

Analysis and Evaluation

Pilot County Reports

Each pilot county will provide a summary county report to the DMH Research and Performance Outcome Development Unit by the conclusion of the second administration of the pilot instruments (approximately November, 2001). The report should provide a quantitative and qualitative analyses of instrument and related data that includes the clinician's perspectives, the child/family's perspectives and the administrative perspective. Counties will be exempted, however, from reporting on those items that are collected and transmitted to the state via the *TELE*form system.

Clinician Perspectives

The report should include narrative summaries of clinician experiences with the instruments, focusing on a comparison of the Ohio Scales with the CAFAS, CBCL and YSR.

1. Summarize clinician responses regarding the ease of administration and use of the completed instruments and any reports generated.
2. For each instrument, discuss clinician responses regarding the clinical utility:
    - Was it helpful in assessing client's needs?
    - Was it useful for developing treatment plans?
    - Was it helpful in setting goals with client?
    - Was it accurate in reflecting clinical status?
3. Provide a comparison of the existing system instruments (CAFAS, CBCL and YSR) and the alternatives (OHIO Scales). Do clinicians recommend or not recommend replacement of the existing instruments with the alternative instruments?
4. For each instrument, summarize any additional suggestions/comments/concerns expressed by clinicians regarding the alternative instruments.
5. Additionally, clinicians should report on the effectiveness of their training and provide any recommendations for process improvement.

Child/Family Perspectives

Each pilot county will collect information from the child (as appropriate) and family member's perspectives on each instrument they complete.

1. Summarize responses regarding how easy/difficult the instruments were to complete.
2. For each instrument, discuss the appropriateness of the questions asked, and describe any client feedback regarding cultural sensitivity of the instruments. Describe the overall acceptability of these instruments to consumers/family members.
3. Summarize the child/family responses regarding how they felt about the overall process.
4. Provide a comparison of the existing system instruments (CAFAS, CBCL and YSR) and the alternatives (OHIO Scales). Does the child/family recommend or not recommend replacement of the existing instruments with the alternative instruments?
5. For instances when a client refuses to complete an instrument, refusal rates should be tracked and a summary should be provided that includes the typical types of reasons children/family members provided for not completing the form(s).
6. Summarize any additional suggestions/comments/concerns expressed by children/family members regarding the alternative instruments.

Administrative Perspective

This report should include a narrative summary of the administrator/evaluator's perspective regarding administration of the instruments. This section of the report should provide information regarding the items listed below.

1. Pilot Site(s): Briefly describe each site that participated in the pilot study including a summary of the services provided and population being served.

2. Training: Provide an overview of the training program, including what worked well and what was less effective. Additionally, the training program description should include an estimate of staff resources required as well as other costs associated with training.
3. Procedures: Summarize the procedures used to select clients and to administer the instruments.
4. Administration: Provide a summary of the time (average, high and low) minutes it took to administer each instrument (the actual time respondent takes to complete). Discuss the ease/difficulty of administering each instrument, the typical level of assistance required (by client groups, if applicable) and summarize any problems that were encountered during administration of the pilot.
5. Staff Time: Summarize the overall staff time per client for a single administration for each of the instruments. If possible, summarize by clinical/clerical/other (please describe) staff levels.
6. Applicability: Provide an opinion regarding the applicability of each of these instruments to the broad range of target population clients.
7. Provide a comparison of the existing system instruments (CAFAS, CBCL and YSR) and the alternatives (OHIO Scales). Do administrators recommend or not recommend replacement of the existing instruments with the alternative instruments?
8. Other: Summarize any additional suggestions/comments/concerns regarding the instruments.

DMH Summary Report

DMH will collaborate with the members of the Task Force in the analysis of the pilot project data. Samples of reports and formats will be discussed and presented that maximize the interpretability of the data. The primary focus of the analyses will be a comparison of the alternative instruments with the existing instruments. The analysis process will include: 1) an examination of group characteristics, 2) an evaluation of the reliability and validity of each instrument using quantitative/psychometric data, 3) an evaluation of the usefulness of specific classification variables for creating models for predicting attrition, outcomes, and for risk adjustment, and 4) a qualitative analysis of instruments and related data.

DMH will complete a quantitative/psychometric analysis of the data that includes:

- Data clean-up
- Generation of descriptive statistics for sample population (age, gender, ethnicity, diagnosis, living arrangements, etc.)
- Generation of descriptive statistics (Mean, Median, Mode, Skewness, Kurtosis, Standard Deviation, Range) for each instrument
- Evaluation of inter-item consistency (Chronbach's Alpha)

- Evaluation of item-total score (or subscale score) correlations to verify that items measure appropriate constructs (Bisereal Correlation Coefficient)
- Evaluation of inter-scale correlations across instruments (as appropriate and where possible) to identify instruments and/or scales measuring substantially the same construct (Pearson Correlation Coefficient)
- Missing Value Analysis
- Evaluation of differences in scoring patterns across age, gender, and ethnic group when classified by diagnostic category (ONEWAY ANOVA with Student-Newman-Keuls post hoc tests. A calculation of Eta square will be calculated to estimate effect size. Only those differences which account for 10% or greater of the variance will be considered as differentially functioning.)
- Evaluation of instrument sensitivity to change over six-month time period for individuals matched on diagnostic category (Repeated Measures ANOVA or Wilcoxan if non-parametric) for cases where longitudinal data is available and independent groups t tests (Or Kruskal-Wallis H if non-parametric) for groupwise comparisons based on a point-in-time analysis.
- Methods will be employed to identify categorical variables that are predictive of improvement or decrement (logistic regression).

Questions During the Study

Please call Brenda Golladay at **(916) 654-3291**, email her at BGollada@dmhhq.state.ca.us or write her at:

State Department of Mental Health
Research and Performance Outcomes Development
1600 9th Street, Room 130
Sacramento, CA 95814

APPENDIX

Evaluation Criteria

The instruments that will be pilot tested during this study will be evaluated based on the criteria established by the task force. The task force will employ the results of the statewide survey as well as other research information to identify criteria and issues relevant to children and youth with serious emotional disorders. Criteria for this evaluation include:

Extent of CMHPC Performance Domain Coverage

The set of instruments must measure the domains identified by the CMHPC and address pertinent issues relevant to children and youth as identified by the CMHPC and the Task Force.

Usefulness of the Data

The extent to which the instrument data provides truly valuable data for each of the following areas will be identified:

- Evaluation of client-level outcomes, including objective indicators of functioning or behavior that can be used to assess system outcomes and effectiveness
- Timely and useful information that a county can use to facilitate quality improvement and evaluate it's performance over time
- Client assessment and treatment planning
- Provision of culturally competent services

Psychometric Qualities

Does the instrument exhibit adequate psychometric properties including:

- Reliability - provides consistent results across raters and participants
- Validity - measures what it proposes to measure
- Sensitivity to change over time
- Normed, standardized, or widely used for child and youth mental health clients
- Operates similarly for subgroups of the population

Comprehensiveness

Does the instrument provide sufficient comprehensiveness on issues such as:

- Applicability to a broad age range of youth
- Inclusion of multiple informants (parent, youth, clinician)
- Collection of important risk factors that facilitate interpretation of the data
- Applicability of data to multiple agencies

System Design

Does the instrument provide for a strong system design including:

- Suitability for target population
- Efficacy of long-term use of the system
- Coordinates with strength-based models

Logistical Constraints

Is the instrument feasible to administer in terms of:

- Affordable to purchase and report - preferably public domain
- Reasonable time to administer for children and youth with mental and physical disorders or other limitations
- Acceptable time to administer and score from viewpoint of county staff
- Available in a wide variety of formats to accommodate the technology used by counties for data input and report generation
- Accommodates cultural diversity - available in languages appropriate for a variety of cultures, where feasible
- Cultural appropriateness – neutral/non-biased